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The taxing implementation of densification: The missed opportunity of the German land value tax

Cornelia Roboger


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Abstract

Densification and more efficient use of land are important planning challenges across Europe intended to aid the pursuit of sustainability goals. Property taxation influences land use. It can discourage or incentivize efficient land use. In the international academic debate, the land value tax is considered an effective land policy instrument that can promote more efficient use of land. Germany is currently transforming its property taxation system and has discussed different property tax models in the political decision-making process. This paper explores the political motivations of this reform based on a discourse analysis of plenary sessions and complementary in-depth expert interviews. On the one hand, the empirical findings highlight the experts' positive assessment of the potential of the land value tax for efficient land use and densification. On the other hand, they also show how the potential allocative effects of the land value tax were largely overlooked during the political debates. Instead, discussion centred around distributional aspects of the property tax. It can be shown that despite the great potential for tackling urgent planning issues, policymakers are hesitant to adopt and apply instruments of land policy that intervene in existing private property rights.

Keywords: Land value taxation ■ densification ■ land policy ■ Germany ■ legislation

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Die steuerliche Umsetzung von Verdichtung: Die versäumte Gelegenheit der deutschen Bodenwertsteuer

Zusammenfassung

Verdichtung und effizientere Nutzung des Bodens sind europaweit wichtige planerische Herausforderungen, um Nachhaltigkeitszielen gerecht zu werden. Die Grundsteuer beeinflusst die Nutzung des Bodens. Sie kann die effiziente Flächennutzung fördern oder hemmen. In der internationalen akademischen Debatte wird die Bodenwertsteuer als ein wirksames bodenpolitisches Instrument angesehen, das eine effizientere Bodennutzung fördern kann. In Deutschland wird derzeit das Grundsteuersystem reformiert und dazu werden im politischen Entscheidungsprozess verschiedene Grundsteuermodelle diskutiert. In diesem Beitrag werden die politischen Beweggründe für die Entscheidung dieser Reform untersucht auf der Grundlage einer Diskursanalyse von Plenarsitzungsprotokollen und ergänzenden Experteninterviews. Die empirischen Ergebnisse zeigen einerseits die positive Einschätzung der Expertinnen und Experten zum Potenzial der Bodenwertsteuer für eine effiziente Flächennutzung und Verdichtung. Andererseits zeigen sie auch, dass die potenziellen Allokationseffekte der Bodenwertsteuer in der politischen Debatte weitgehend ausgeblendet wurden. Stattdessen konzentrierten sich die politischen Debatten auf Verteilungsaspekte der Grundsteuer. Es kann dargestellt werden, dass die Politik trotz des großen Potenzials für drängende Planungsfragen zögert, bodenpolitische Instrumente zu beschließen und anzuwenden, die in bestehende private Eigentumsrechte eingreifen.

Schlüsselwörter: Bodenwertsteuer ■ Verdichtung ■ Bodenpolitik ■ Deutschland ■ Gesetzgebung

1 The land value tax as an instrument of land policy

Many European land and housing markets are facing the challenge of a growing housing crisis. Persistent excess demand on the markets is resulting in massive price increases and a housing shortage (Housing Europe 2021: 18). A study of housing trends in Europe finds that increases in rents and a lack of affordable and social housing are the “most common and most serious problems across the EU’s member states” (Krapp/Vaché/Egner et al. 2022: 83). One of the strategies employed in practice to deal with excess demand is to increase supply in the markets. The previously common practice applied for this purpose often included the zoning of land for construction in suburban areas and the expansion of cities. However, such policies resulted in issues such as very high land uptake and urban sprawl. Relying solely on this strategy can be considered outdated as it does not correlate with current objectives for sustainable development. Densification is used as a strategy for spatial development to meet sustainability requirements while also addressing the issue of a housing shortage. The process of densification can be defined as “the construction of new housing units within existing residential areas” (Broitman/Koomen 2015: 32). The aim is to use the built-up land more efficiently rather than designating more building land on the outskirts of cities (Broitman/Koomen 2015: 32). More and more European countries define densification as a policy goal in order to deal with the challenges on the markets.

The basis of densification is the current inefficiency in the use of land. In the built structures are areas that are currently underutilized or not being used at all. These can be found across cities in various forms and have huge potential for inner development (Broitman/Koomen 2015: 32). The inefficient use of land results from a complex interplay of different factors including the development decisions of landowners and the extent to which municipalities exercise their right to control land. While planning creates and determines the rules of land use in an area, landowners ultimately decide how the land is developed and used (Debrunner/Hengstermann/Gerber 2020: 262). They may not, however, be interested in using their land in the most efficient way or making maximum use of the development possibilities set by planning law. To nonetheless achieve the densification of these areas, municipalities have to intervene in the private property rights of landowners. This poses a particular challenge when trying to implement densification (Dembski/Hartmann/Hengstermann et al. 2020: 212). The necessary intervention in existing structures and private property rights is a major challenge and frequently a reason for densification to fail in practice.

Property taxation is one factor that affects the use of

land. The property tax is a tax levied on land ownership. Despite the fact that it is primarily a fiscal tool, any property tax model provides incentives for owners’ development decisions. The impact of a property tax on land use is influenced, among other things, by the tax base and the indicators used to calculate it. The tax burden is calculated using the land, the building, both, or another factor entirely. These can be represented by value, area, or another indicator. A widely used type of property taxation is calculated using value indicators to include both the land and the building. However, this model of property taxation provides an incentive for landowners to use their land inefficiently because a decision to build more densely on their land would lead to a higher tax burden (Löhr 2018: 90–91; Thiel/Wenner 2018: 78–82). Therefore, the less expensive decision for owners is building less. Property taxes influence the development decisions of landowners and thus influence land use.

One possibility to eliminate an unfavourable incentive of property taxation is the implementation of a land value tax. The land value tax is a property tax model in which the link between property taxation and land use can be utilized to promote densification. In this tax model, the tax burden is determined solely by the value of the land. The buildings on the land are not taken into account. Thus, building more does not result in a higher tax burden. The land value tax removes the incentive for inefficient land use and instead provides an incentive for landowners to develop their land more densely (Thiel/Wenner 2018: 78–82). Since the tax is levied regardless of development, the burden is the same no matter whether the plot is developed densely, used as a garden or left vacant. With the land value tax as a model of property taxation, “the only way to lower the effective burden of the tax is to use the site efficiently” (Thiel/Wenner 2018: 81). As a result, the tax can encourage owners to fully utilize their property’s development potential. However, the tax model is rarely applied in reality. The successful application of the land value tax has many hurdles, such as the complex assessment of unimproved land values or socially unfavourable effects in difficult cases, such as asset rich and income poor persons who may not be able to bear the tax burden (Schwerhoff/Edenhofer/Fleurbay 2022: 20; Morgan/Shahab 2023: 4). Nevertheless, the land value tax is a model of property taxation that can be used as an instrument of land policy to promote densification if implementation hurdles can be overcome.

The reform of property taxation currently taking place in Germany provides an opportunity to investigate the use of land value tax as an instrument of land policy. A decision of Germany’s Federal Constitutional Court ruled that the property taxation system needs to be reformed due to is-

sues regarding the equal treatment of citizens.¹ The legality of the property tax has been questioned for some time, but the reform has been delayed because of the significant effort involved in decision-making and implementation. The unequal treatment in property taxation stems from the obsolescence of valuations used to calculate the tax, which currently refer to the years 1935 and 1964. Due to the complexity of the previous system and the resulting effort of updating, no updates have since been undertaken. The court ruled that the taxation system be reformed by 2025, and specifically pointed out the possibility of pursuing extra-fiscal governance effects through a property tax.

Various studies on property taxation have been conducted in Germany due to the long-known deficiencies of the property tax system. However, these studies are primarily concerned with the distributive effects of property tax models. The studies investigate the distributional effects on citizens, municipalities and federal states (Henger/Schaefer 2015; Fuest/Immel/Meier et al. 2018; Henger 2020). Although the German legislature clearly defined from the outset that the reform should be revenue-neutral for the municipalities, the reform nevertheless leads to shifts in the tax burden on citizens, and the municipalities themselves are ultimately responsible for the level of tax revenue by setting the tax rates (Henger 2020: 41). While the distributive effects of different property tax models have been extensively discussed, the effects on the use of land have not. As a result, there is a gap in the assessment of the effects of property taxation on land use.

The objective of this paper is to look into the relationship between property taxation and land use. The property tax reform in Germany is taken as an opportunity to investigate the land value tax and its limited implementation in practice. This is carried out by examining the political discussion and decision-making around the property tax reform at the federal level. Furthermore, municipal perceptions of the opportunities and difficulties of the introduction of a land value tax on a local level are examined. Based on these findings, a conclusion can be drawn about the political decision-making process and the municipal implementation of a land value tax.

The paper is structured as follows. Section 1 establishes the relevance of densification and introduces the German property tax reform as the research context. Section 2 looks into the theoretical and historical origins of the land value tax. The methodological approach is explained in Section 3. Sections 4 and 5 present the research findings, including an analysis of policy documents regarding the

property tax reform, and insights gained through interviews with municipal experts on the local implementation and effects of a land value tax. The implications of the findings are discussed in Section 6, leading to the conclusion in Section 7.

2 Land value taxation and land use

The property tax is an annual tax collected by the state on the ownership of land. In the case of a land value tax, the tax burden is determined solely by the value of the land. The strategy of this model is to tax the unimproved land rent that is primarily created by the state, while private investments by landowners in buildings or other improvements have no bearing on the tax burden (Löhr 2018: 91–92). The land value tax thus refers to durative instruments of land value capture that collect a portion of the land rent on a regular basis (Viallon 2018: 58). The idea of using property taxes to skim land rents has been around for a long time. Henry George is regarded as having had a key impact on the land value tax due to his single tax policy based on a tax on unimproved land (George 1881). However, the concept of differentiating between unimproved land and improvements, and taxing the value of unimproved land goes back much further and was influenced by various economists such as David Ricardo and Adam Smith. The land value tax is a form of property taxation that takes into account only the value of unimproved land created by the state and society.

The focus on taxing the land instead of improvements also affects the use of land. Because improvements are not taxed, only the most efficient use of land reduced the effective tax burden. The relatively high cost of leaving land vacant or underutilized can influence landowners' decisions on how to use their land. Many studies that focus on the link between a land value tax and land use indicate that the tax may be able to contribute to more efficient land use. Such research identifies different areas that are affected by land value taxation that either directly or indirectly relate to efficient land use. Topics that serve as indicators for efficient land use include various factors related to the development process, such as the timing of development, the number and capital intensity of building permits and the capital investment for new developments. The application of the land value tax can be identified as having an accelerating effect on land activation and development (Edwards 1984; Turnbull 1988; Skaburskis/Tomalty 1997; Arnott 2006), no effect on the timing of development (Mathis/Zech 1982; Roakes/Barrows/Jacobs 1994) or an ambiguous effect (Anderson 1999; Arnott/Petrova 2006). Examination of the number and capital in-

¹ Bundesverfassungsgericht, Judgement of the First Senate of April 10, 2018; BvL 11/14, 1 BvR 889/12, 1 BvR 639/11, 1 BvL 1/15, 1 BvL 12/14.

tensity of building permits makes clear that a land value tax can result in more building permits (Cord 1983; Bourassa 1987; Oates/Schwab 1997; Plassmann/Tideman 2000; Gemmell/Grimes/Skidmore 2019) and a higher capital intensity of building permits (Cord 1983; Oates/Schwab 1997) or have no influence on permits (Bourassa 1990; Plassmann/Tideman 2000). Looking at the capital intensity of realized development, the various studies mostly confirm that the land value tax may lead to more capital-intensive development (Sause 1954; Pollock/Shoup 1977; Edwards 1984; Chapman/Johnston/Tyrrell 2009; Banzhaf/Lavery 2010; Choi/Sjoquist 2015). The effects can be used as an indicator that the application of the land value tax may result in more construction and increased density of new development.

Areas that more directly reflect the effects of the land value tax on land use include urban development as well as building and population density. According to the related studies, the land value tax can encourage higher density development (Brueckner 1986; DiMasi 1987; Turnbull 1988; Skaburskis/Tomalty 1997; Gihring 1999; Arnott 2006; Junge/Levinson 2012; Cho/Kim/Lambert et al. 2013; Cho/Kim/Roberts et al. 2015; Duke/Gao 2021), a shift from single-family housing to multi-family housing (Anas 2014), and taller buildings with more floor area (England/Ravichandran 2010). It has also been emphasized that the land value tax can encourage infill development if land price increases in the targeted area are not too high (Gihring 1999). The densifying effect of the land value tax is also reflected in effects such as a smaller city area (Brueckner/Kim 2003) and higher population density (Choi/Sjoquist 2015; DiMasi 1987), indicating a higher intensity of land use. According to research linking the land value tax and urban development, new development is more likely to occur near existing development (Cho/Kim/Roberts 2011; Cho/Roberts/Lambert 2016), further implying denser development. A closer examination of the effects of the land value tax on urban development reveals that the activation and dense development of land may be an unfavourable consequence in areas where demand is low and there is already sufficient housing. Accordingly, it is critical to consider where a land value tax should lead to the activation of land and how the effects should be directed (Banzhaf/Lavery 2010: 177). The empirical findings highlight the densifying effects of the land value tax based on different indicators and identify the importance of a deliberate application of the tax.

Despite the promising effects of the tax in theory and the extensive literature on its effects on land use, there has been very limited implementation of the land value tax. Very few countries choose the model for property taxation and even in the few cases where it is chosen, rates of application are low

(Milan/Kapfer/Creutzig 2016: 344). Various hurdles have been identified to the implementation and application of the land value tax. A key challenge is seen in the difficulties of valuing unimproved land. Valuation requires a comprehensive database and is considered very complex (Morgan/Shahab 2023: 4). Another hurdle is resistance from middle-class taxpayers who have a strong influence on policies and might fear being disadvantaged by the tax, complicating political implementation (Schwerhoff/Edenhofer/Fleurbay 2022: 20). Lastly, the transition to a land value tax might lead to socially difficult cases. This is mainly discussed in the form of asset-rich, income-poor individuals who own high-value land but would not be able to pay the corresponding tax and would thus fear eviction from their homes (Morgan/Shahab 2023: 4). Similarly, cheap and low-quality housing on expensive land could be demolished and redeveloped with higher-quality housing under the land value tax, which might lead to higher rents and gentrification (Schwerhoff/Edenhofer/Fleurbay 2022: 20). The significance and possible solutions to the challenges are discussed in the literature (Schwerhoff/Edenhofer/Fleurbay 2022: 20; Thiel/Wenner 2018: 82). Overall, this highlights, on the one hand, the promising characteristics of a land value tax for a sustainable use of land and, on the other hand, shows the difficulties in the implementation and application of the tax.

3 Methods

To gain a comprehensive understanding of the application of a land value tax as a land policy instrument, various perspectives were included. A mixed-method approach was carried out, including a discourse analysis and semi-structured expert interviews.

A discourse analysis based on Keller (2011) was conducted to investigate the political decision-making process. The documents examined are the minutes of the plenary sessions of the *Bundesregierung* (German federal government) and the *Bundestag* (German federal parliament). The verbatim minutes reflect all politicians' contributions and interjections in a plenary session and are intended to ensure that the political will of the legislator is understandable to all citizens.² Access is provided via the Documentation and Information System for Parliamentary Materials (*Dokumentations- und Informationssystem für Parlamentsmaterialien*).³ In order to investigate the decision-making process, the analysis included all the motives that policymakers put forward

² see <https://www.btg-bestellservice.de/pdf/20083800.pdf> (02.10.2023).

³ <https://dip.bundestag.de/experten-suche> (02.10.2023).

relevant to the design of the property tax or the decision for specific taxation models. The period was set based on the date of the court ruling on property taxation on 10 April 2018 until the day of the decision about the reform on 10 June 2021. Discussion of the introduction of a separate land policy instrument was explicitly included. In German property taxation a distinction is made between agricultural land (*Property Tax A, Grundsteuer A*), built-up urban land (*Property Tax B, Grundsteuer B*) and unused built-up land (*Property Tax C, Grundsteuer C*). Property Tax C is thus a specific taxation instrument to activate unused building land. While the introduction of this instrument is not related to the property tax reform, it relates to the topic and is based on the same effects. It was therefore included in the analysis. The texts were analysed using the open coding process of the grounded theory method. Afterwards, the text sections were generalized and categorized to get a better overview of relevant motives.

Nine semi-structured interviews with municipal actors were conducted to provide a perspective on the practical implementation of a land value tax on the municipal level. The interviews were conducted in 2022. Experts were selected according to their knowledge of municipal work related to spatial planning, development of real estate and land, or taxes. The experts were approached via social media, an approach to the municipal departments or a referral by experts. Interview guides were used for the semi-structured interviews. After the transcription, a structuring qualitative content analysis based on Kuckartz (2016) was carried out.

4 The shortcomings of Germany's property tax reform

The political discourse dealing with the property tax reform was investigated in order to better understand the decision-making process. The minutes of the political plenary sessions were used to explore the various motives and arguments that led politicians to favour or reject specific property tax models. In total, 33 documents containing information on the motivations for choosing a property tax model were reviewed. In particular, the consideration of land use and spatial development in the debate and the final decision concerning the property tax reform was examined. The findings contribute to a better understanding of the policy process and decision-making in relation to options for influencing the use of land.

Policymakers claimed different motives when arguing for the implementation of a property tax model. The motives put forward can be summarized in various categories: administrative effort and cost, justice of the tax burden, effort and costs for taxpayers, importance to the municipality, le-

gal certainty, dealing with federalism, comprehensibility of the tax system, and spatial development and land policy. The administrative effort of the federal states associated with the reform and tax collection was by far the most relevant and frequently mentioned argument. The importance of ensuring low administrative effort has design consequences for the new property tax model, such as a preference for the status quo or the selection of the new tax model based on the least amount of data to be collected. Another major motivation was to ensure justice by ensuring that the burden imposed on taxpayers is reasonable, especially with reference to the difficult financial situation experienced by some taxpayers. Given the current difficult state of the housing markets, the importance of avoiding a substantial increase in costs related to housing was emphasized several times. Policymakers stressed that they do not want to worsen the already precarious housing situation. The importance of property taxation for municipalities, legal certainty, dealing with federalism and comprehensibility of the tax for citizens were subject to less argument and more agreed upon by all actors involved. The most important motivations could therefore be identified as the federal states' administrative effort and cost, the consideration of justice in the context of a fair burden on taxpayers, and the cost for taxpayers, with a particular emphasis on the context of increasingly high housing costs.

In comparison, spatial development and land policy played a particularly minor role in the debate concerning the property tax reform. Policymakers only rarely discussed the possible spatial consequences or effects of the property tax. The discourse included no consideration of the land value tax model or its effects. The impact of the property tax on spatial development was only discussed in the context of its complete abolition. One politician argued that the property tax reduces the willingness of property owners to invest. Accordingly, they suggested the abolition of the property tax would provide an incentive for owners to build on their land. Apart from that, arguments related to spatial development or land use seemed to be rather used as buzzwords. For example, one politician stated that the property tax reform should promote affordable housing, but did not specify how this effect could be realized or how the topics are related. Thus, the promotion of affordable housing was used rather as a buzzword instead of in an argumentative context. The findings show that the impact of the tax as a land policy instrument on land use were rarely considered or indeed not considered at all by policymakers.

As stated in the methods, another land policy instrument whose implementation is currently discussed in Germany was considered in the discourse analysis. The instrument *Grundsteuer C* is also based on a taxing mechanism, and its application is aimed at activating building land. In con-

trast to the land value tax, the *Grundsteuer C* needs to be voluntarily activated by the municipality in individual cases and can only be levied on building land that is completely empty. The *Grundsteuer C* is a separate land policy instrument and not involved in the property tax reform, but it is included in the discussion because of the similarities between the two. The inclusion of this instrument in the analysis highlights the disregard for issues of spatial development and land policy in the reform of the property tax. Only when this topic is included in the analysis, is it possible to identify discussion of the link between property taxation and land use. In this context, the current low efficiency of land use was stressed and attention drawn to the aim of the instrument to incentivize owners to efficiently use their land and prevent land speculation. One politician presented the possibility of activating land and supporting densification by taxing the vacant lots with the *Grundsteuer C*. In addition, politicians specifically stated that the tax on undeveloped land could be used as part of a responsible and active land policy. By including this aspect in the investigation, it was possible to highlight actors' knowledge of the potential effects of taxation on the use of land. Policymakers explicitly mentioned the use of a tax to create financial pressure and encourage an active land policy and the activation of previously unused building land. Considering the knowledge of policymakers of the possibilities of using a property tax to promote densification, the disregard for spatial effects and land policy is particularly striking.

The motives of policymakers that are particularly relevant in the discourse appear to be linked to the difficult situation and preconditions for the property tax reform. The court ruling is based on the unequal treatment of taxpayers, which is a result of the high cost and effort of reassessing values for taxation. Accordingly, the discourse of the reform addressed both the effort involved in implementing the models and the fairness of the burden on taxpayers. Finally, taking into account taxpayers' financial burden in the form of housing costs is consistent with the relevant and precarious situation of affordable housing. However, it is notable that the effect of the property tax on land use and spatial development was overlooked in the discourse examined here. Disregarding the effects of property taxation on land is a significant omission, especially given that issues of land use, such as a lack of affordable housing, were frequently mentioned.

This is further emphasized when the *Grundsteuer C* is considered in the analysis. In this context, the actors demonstrated that they are well aware of the impact of a tax burden on inefficiently used land, and at least some of them are convinced of its beneficial effects. Nonetheless, the participants in the plenary discussions did not consider the link between property taxation and land use for the reform. This suggests

that actors are aware of the possible effects of implementing a land value tax but chose not to discuss them. While the relevance of some motives is understandable given the context, disregarding the effect of property taxation on land use is a significant shortcoming of Germany's property tax reform. One of the most critical findings in this context is the clear discrepancy between the academic debate about the land value tax and the political process taking place in Germany. It is noteworthy that the land value tax was scarcely mentioned in the plenary discussions, which makes a more detailed analysis of opinions and motives regarding the tax model obsolete.

5 Municipal use of a land value tax

Nine semi-structured interviews were conducted with municipal stakeholders to discuss the practical implementation of a land value tax. In order to understand the context of the experts' knowledge, it is important to be aware of the municipalities' approach to planning and intervention in private property in Germany. The practice of land use planning at the municipal level in Germany is based on a two-tier system. First, municipalities are obliged to make a preparatory land use plan for their entire area (§§5-7 BauGB).⁴ This plan roughly outlines the types of land uses based on the intended development. The preparatory land use plans are deliberately not parcel-specific and are only binding for the municipality. Based on the preparatory land use plan, municipalities can draw up binding land use plans, which cover only a small portion of their territory (§§8-10a BauGB). This plan defines the type and extent of permissible development on a parcel-by-parcel basis and directly creates building rights for landowners. However, municipalities are not obliged to draw up binding land use plans. In areas without binding land use plans, the municipality evaluates new developments to determine whether they fit in with the immediate surroundings (§34 BauGB). This leads to very different situations and regulation in areas of the municipalities that are covered by binding land use plans and areas that are not (OECD 2017: 107).

Germany's approach to land policy, especially regarding the strategic activation of land, is rather passive. Municipalities typically do not initiate development processes, but wait for landowners and developers to take the lead. While the German approach emphasizes theoretical processes and plans, it frequently results in weak implementation of land

⁴ Baugesetzbuch in der Fassung der Bekanntmachung vom 3. November 2017 (BGBl. I S. 3634), das zuletzt durch Artikel 3 des Gesetzes vom 28. Juli 2023 (BGBl. 2023 I Nr. 221) geändert worden ist.

Table 1 Conducted interviews

No.	Role	City	Area in km ²	Inhabitants
1	Economic Development and Real Estate	Büren	171	21,328
2	Urban Development	Dortmund	280	586,852
3	Taxes, especially Property Tax Reform	Dortmund	280	586,852
4	Urban Planning and Building Law	Kirchheim unter Teck	40	40,954
5	Urban Development	Konstanz	54	84,736
6	Planning and Development	Kornwestheim	15	33,681
7	Urban Development and Land Use Planning	Leinfelden-Echterdingen	30	40,100
8	Urban Planning	Lörrach	39	49,523
9	Real Estate and Housing	Ludwigsburg	43	93,117

use plans (Hartmann/Spit 2015: 733–735). Although numerous land policy instruments are available, and theoretically viable to use for densification, their implementation frequently fails in practice. The hurdles include the great workload involved due to the high administrative requirements and strict regulations, the difficulties of involving all stakeholders and the significant legal risks for the municipality due to the high propensity of landowners to sue in response to interference with their private property. As a result, intervention-intensive instruments play a minor role in municipal practice and are often perceived as ineffective (Albrecht 2018: 64; Kolocek 2018: 190; Kolocek/Hengstermann 2020: 564, 571).

In selecting the interviewees, care was taken to cover different perspectives on the areas of implementation and impact of the tax, thus covering aspects of economic and fiscal development as well as planning and building development in the municipalities (see Tab. 1). To achieve this, interviews were conducted with employees of the municipal administration who hold a variety of roles and positions within the municipal administrative structures. Interviewees included heads and other non-elected employees of various municipal departments such as urban development, real estate, building law and taxation. This approach allowed for the gathering of different views and insights on the application of a land value tax as an instrument of land policy. The municipalities represented by the interviewees include a wide range of population sizes and city areas. However, the selection process was not intended to be representative but was rather driven by practical feasibility. Among the topics discussed with the experts were the current handling of densification, an estimation of landowners' reactions to the land value tax, and an assessment of the hurdles and potentials of the application of a land value tax.

The interviews discussed the current situation of municipalities' knowledge and handling of inefficiently used land. The experts involved in the process of planning described how the municipalities' knowledge of potential areas for densification is oftentimes based on an incomplete

database. For the most part, only data on completely vacant plots is available. According to the experts involved in working with owners, the majority of potential densification areas are owned by private individuals and have a small-scale and heterogeneous structure. Despite this assessment, experts said that when it comes to activating land for densification, municipalities prioritize commercial owners or owners with larger areas. The emphasis on large areas is motivated by a desire to have a large impact on development as well as the high resource expenditure associated with small-scale densification, which appears ineffective in comparison to new developments. The main obstacles were identified by the different experts working in planning and include the non-binding nature of planning and the lack of options for binding the owner to planning decisions. Experts explained that while land policy instruments to bind owners to planning decisions are available, implementing them involves significant legal and political obstacles that are difficult to overcome. Intervention in private property is difficult due to the strong legal protection of private property rights. The implications of the interventions for local politics further complicate the situation. Local politics can be a facilitator or a hindrance to densification, with most experts pointing to the latter. Local policymakers see owners as voters and, as a result, are hesitant to risk upsetting them by forcefully interfering with their property rights. According to one expert with experience of working in municipalities of various sizes, this situation is especially difficult in smaller municipalities due to the close ties between politics and citizens. The experts described a difficult situation in the municipalities with challenges in various areas.

Municipal experts differed greatly in their assessment of the impact of a land value tax. According to one expert working in planning, the tax would have no effect in their municipality because it does not address or solve existing problems, and a higher tax burden would simply be accepted due to the property owners' good financial situation. Other experts identified two possible outcomes of a land value tax. Two experts working in planning and on the eco-

conomic development of their cities believed that the taxing of undeveloped or underutilized land strengthens the municipality's position while encouraging property owners to reconsider land use and development. One expert, who is regularly in close contact with owners, suggested that the tax may have an incentivizing effect on owners, encouraging them to reconsider their land use; this was viewed as being especially beneficial and possible to achieve even if the tax is designed with a low financial burden. Other experts who mainly work in planning, highlighted the beneficial effect of the pressure put on landowners by a high tax burden. Accordingly, they expect the effect of the land value tax to be greater if the tax burden is higher. In terms of the scope of the effect, the experts working in planning noted that the land value tax is more likely to activate individual cases rather than having an area-wide or resounding effect. However, one expert, who is especially involved in the housing issues of the city in question, emphasized that activating a small share of the land is also desirable and has significant potential if the effect can be transferred to a nationwide level. While experts do not believe that a land value tax is a silver bullet for solving all issues, they do see appropriate scenarios for using the tax to promote denser development and more efficient land use.

Another topic addressed in the interviews is the tax's application in municipal practice as well as the potential benefits and challenges that may arise. Different experts viewed the link between local politics and determining the burden of the land value tax as both a challenge and an opportunity in the municipal application. An expert with a lot of experience of working with local policymakers emphasized that the impact of the tax always depends on the political will to implement it properly, as this determines the final tax burden. Accordingly, one challenge is the determination of local policymakers to impose an effective burden in order to use the tax's potential effect. In this context, another expert, focusing on the economic and real estate development of his city, emphasized the great potential of using a land value tax as a land policy instrument. He recognizes a significant advantage in the fact that the tax is initiated by the federal government or the federal states. This may facilitate the implementation of the tax because local policymakers are not required to appear as the source of the tax and can thus distance themselves from its impact. One urban development expert emphasized that the land value tax is best realized as part of a larger municipal strategy to activate land. Thus the land value tax should be used in conjunction with design instruments to effectively and desirably direct the resulting financial pressure. In this context, that same expert warned that uncontrolled and untargeted pressure and activation may also be a harmful and unwanted effect of the tax. Multiple experts emphasized that the use of a land

value tax should be considered given the difficult situation of ineffective instruments, the difficulty of intervening in the market and in private property, and the especially difficult situation when planners are unable to activate owners through cooperation.

The interviews with municipal experts highlight the potential effects and challenges of municipalities in using a land value tax. Given the shortcomings of current activation attempts, the land value tax's significant potential for land activation was underlined. The experts identified a deficient database, the high workload and unsuitability of the existing instruments, political and legal hurdles, and the non-binding nature of planning for owners as reasons for the inadequate activation. Some of these hurdles can be mitigated or avoided with the land value tax. By using the instrument at the municipal level, it is possible to avoid some of the larger legal or administrative issues. It is not necessary to have a small-scale, precise database about the areas or their heterogeneous and numerous owners in order to achieve the densifying effect. The tax burden and steering effect occur without the need to specifically address the owners or activate the instrument, thereby avoiding the current barriers to activation identified by experts. The tax has a direct impact on owners, both as an incentive and as a means to encourage planning implementation through financial pressure. While the land value tax has no effect on the non-binding nature of planning, it can provide owners with an incentive to better implement urban planning regulations. The tax is levied on land, so it directly addresses the owners, thus reaching the relevant stakeholders. According to experts, the pressure created by the land value tax can be combined with other instruments to direct development. Thus, the land value tax could be used to support design instruments by increasing pressure and thus strengthening implementation. To unfold its potential, the steering effect must be politically desired and strategically implemented. The political debate may both further and hinder the effective implementation of a land value tax. While there is the advantage that local politics will not initiate the intervention and will thus be more likely to support it, effective implementation can only be achieved by establishing an appropriate tax burden. The impact of the tax is expected to be localized rather than widespread. This impact, however, can still be a significant step toward denser development and more efficient land use.

6 Discussion

A key finding of this investigation is the disregard of the effect of property taxation on the use of land. The academic literature as well as the experts of various municipal de-

partments highlight the potential use of property taxation for promoting densification. The identified effects include an incentive for owners to reconsider their decisions about how to develop and use their land as well as the possible activation of land through the financial pressure that is put on owners. This highlights the potential to use the land value tax for overall denser development. Still, none of this was considered in the plenary sessions of the reform of the property taxation system in Germany. Neither the general link between property taxation and land use, nor the steering effect of land value taxation was discussed by policymakers. The minutes of the plenary session reveal that the effects of property taxation on land use was not taken into account in the decision-making process. This is even more surprising in the face of the court ruling that explicitly mentioned the use of a property tax for extra fiscal steering effects and the importance of housing issues in the plenary discussions.

The disregard of policymakers for this topic does not, however, seem to stem from a lack of knowledge. This can be seen by including consideration of the *Grundsteuer C* as a land policy instrument whose application is currently under discussion in Germany. While this instrument does not have the same overall impact and strengths of a land value tax, the taxing instrument utilizes the same incentivizing effect and financial pressure on owners to try to support densification. While the *Grundsteuer C* is not part of the property taxation system reform, both are discussed together because of the similar taxing mechanism. Including discussions about this instrument in the discourse analysis highlighted the fact that policymakers do know about the link between property taxation and land use and especially about the possible utilization of land value taxation for its densifying effects. Still, despite these effects and the corresponding knowledge of policymakers, the use of land was disregarded in the decision-making process. The findings thus point to a conscious decision to disregard the topic of land use in the political decision-making process of the reform of property taxation. This discrepancy between what policymakers and science know and how policies are implemented demonstrates a significant gap between theory and practice. Further research is necessary to understand why this gap emerges and what it means for policy formulation and implementation.

Closely related to this, the findings on the hurdles of implementing a land value tax highlight the underlying difficulty of intervening in the private property rights of landowners. Some of the experts, especially those with experience of working closely with landowners and policymakers, identified political restraints and legal difficulties as the main hurdles for an effective implementation of the land value tax. Effective implementation requires that local policymakers decide to ensure an effective tax burden. At

the end of the process of levying the property tax, the municipality can decide on a percentage rate with which the burden of the property tax is defined. For the land value tax to promote densification, policymakers would need to decide on a rate that results in a tax burden high enough to have an incentivizing or pressuring effect on owners. In the interviews, the experts highlighted the severe reluctance of local policymakers to decide on policies that might have negative effects on owners, especially when intervening in private property rights. The experts identified different reasons for this behaviour. For example, they suggested that policymakers worry about negative responses by owners and citizens as they rely on their votes. As a result, local policymakers try to intervene as little as possible in the private property rights of landowners. In addition, local policymakers themselves are often affected by the possible negative consequences of policies or have close ties with affected citizens, further impeding the situation. The experts also identified the strong resistance of landowners as a closely related hurdle for the implementation of a land value tax. They described the owners as being very resistant to interventions in their private property and expect owners to sue the municipalities when a new property tax model is implemented. One expert explicitly mentioned his expectation that many court rulings will follow the implementation of the property tax reform, regardless of which model is implemented. While the experts identified the hurdles with specific reference to the property tax case, the findings point to general difficulties. The highlighted problems related to interventions in private property rights, the reluctance of local policymakers and the strong resistance of landowners may actually be more fundamental. Thus, these difficulties may be transferable to other policies and instruments that involve similar intervention. Further research is needed to fully understand the strategies of involved actors and how municipalities steer urban development despite the obstacles presented.

7 Conclusion

This paper revealed interesting findings on the use of the land value tax as an instrument of land policy. First, different effects of the land value tax can be identified. The tax can provide landowners with an incentive to reconsider their decisions on the development and the use of their property. This is strengthened by the effect of the pressure on landowners resulting from the financial burden. Landowners with large areas that present great potential for densification might have to pay a significant amount of property tax under the model of land value taxation. As the tax burden does not increase with more development and the effective

tax burden can only be reduced by the most efficient use of their land, this may lead owners to decide to use their property more densely. However, with this effect, the instrument might worsen the socially difficult situation whereby access to spacious housing and land is limited to those who can afford the land and the higher tax. Second, various hurdles for the implementation can be identified. The main hurdle is the lack of political will to efficiently implement the land value tax. On a state level, this can be seen in the disregard of the land value tax in the political decision-making process. The model as well as its potential use were not considered by policymakers. On a local level, municipal experts identified strong political reluctance to use property taxation as a land policy instrument and intervene in private property rights. As the land value tax is dependent on local policymakers ensuring an effective tax burden, this represents a significant hurdle in implementation. The interviews also revealed the expectation of the municipalities that landowners would react to the property tax reform with great resistance and legal complaints, leading to the need for court rulings. For an effective use of the effects of the land value tax, the tax needs to be realized with a fitting tax burden and integrated into an overall strategy of densification. The tax burden is a significant factor determining the pressure that is put on owners to develop their land. However, this pressure also needs to be part of a greater municipal strategy to direct the effects and the resulting development.

Especially in the German context of a deficient database and the difficulties of intervening in private property, the land value tax may have great potential. The tax does not rely on being activated for individual plots and there is no need to have data on inefficiently used plots or their owners. Furthermore, the land value tax can weaken the hurdle posed by reluctant local policymakers, which is currently preventing the required intervention in private property. As the tax is instigated by state legislators, local policymakers do not need to appear as the cause for the resulting pressure on their citizens. The findings show the great potential of the use of the land value tax as a land policy instrument to promote denser development. The Germany property tax reform also represents an opportunity for future research. An ex-post analysis could be performed in the future to explore the effects that the land value tax (as well as other future property tax models) have on land use in Germany. Further research is also needed to understand the difficulties that the investigation could highlight when it comes to the political process of intervening in the private property rights of landowners. For this, the interests of landowners and their involvement in the densification process need to be taken into account.

Overall, it is possible to assert that the link between property taxation and land use is significant. The land value

tax can be identified as a land policy instrument that has the potential to promote densification and support more efficient land use. However, in order to achieve these results, there must be political will to implement and effectively apply the instrument. Policymakers play an important role in the utilization of the land value tax for densification, both as a challenge for the implementation and as a requirement for its effective use. If the obstacles and disregard can be overcome, the land value tax could be used as a land policy instrument to contribute to densification and efficient land use. But in the case of Germany, it can be concluded that for the – indeed – taxing implementation of densification, the disregard of the land value tax in the reform can be considered a missed opportunity.

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